

WHAT IS CLAIMED IS:

1. A friction stir welding method of a first panel and a second panel, said first panel having a first plate, a second plate connected to said first plate, and a third plate connected to said first plate, said second and third plates being connected respectively to opposed ends of the first plate, said second plate and said third plate being disposed substantially parallel, said first plate being disposed substantially orthogonal to said second plate and said third plate;

said second panel having a first plate, a second plate connected to said first plate of said second panel, and a third plate connected to said first plate of said second panel, said second plate and said third plate of said second panel being disposed substantially parallel, said first plate of the second panel being disposed substantially orthogonal to said second plate and said third plate of the second panel, comprising the steps of:

abutting said first panel and said second panel, with said first plate of said first panel and said first plate of said second panel abutting each other, thereby providing an abutted portion where the first and second panels abut each other;

at a side of said second plate in said abutted portion and at a side of said third plate in said abutted portion, arranging respective rotary tools; and

in a direction of one of said rotary tools, perpendicular to the second and third plates, arranging another of said rotary tools; and

carrying out a friction stir welding by moving said two rotary tools with substantially a same velocity.

2. The friction stir welding method according to claim 1, wherein a rotating center of said one of said rotary tools and of said another of said rotary tools is on a same line.

3. The friction stir welding method according to claim 1, wherein said second plate of at least one of said first and second panels has a protruding portion thereon at said abutted portion, protruding away from the first and second panels in a thickness direction of the first and second panels.

4. The friction stir welding method according to claim 1, wherein at least one of the second and third plates, of at least one of the first and second panels, has a protruding portion thereon at said abutted portion, protruding away from the first and second panels in a thickness direction of the first and second panels.

5. The friction stir welding method according to claim 1, wherein each of said second and third plates of each of said first and second panels has a protruding portion thereon at said abutted portion, protruding away from the first and second panels in a thickness direction of said first and second panels.

6. The friction stir welding method according to claim 1, wherein the second plates of the first and second panels and the third plates of the first and second panels are friction stir welded in the step of carrying out the friction stir welding, the friction stir welding of the second plates and of the third plates being performed simultaneously.

7. The friction stir welding method according to claim 1, wherein the first plate of the first panel is connected to end parts of the second and third plates of the first panel.

8. The friction stir welding method according to claim 7, wherein the first plate of the second panel is connected to end parts of the second and third plates of the second panel.